Available online at www.sciencedirect.com

SciVerse ScienceDirect

Procedia - Social and Behavioral Sciences 70 (2013) 696 – 701

Procedia
Social and Behavioral Sciences

Akdeniz Language Studies Conference 2012

Belief, knowledge and expectations on language instruction via ICT: A close/critical look by experts

H. Sezgi Sarac*

Başkent University, Faculty of Education, Ankara, 06810, Turkey

Abstract

Information Communications Technology (ICT) has been approached with hesitancy in relation to personal expectations, knowledge and beliefs. Belief is interwoven with expectations and knowledge, as well as judgments, decisions, perceptions, values and opinions. As ICT applications, computer assisted language learning packages lack scrutiny by experts in both language instruction and computer technologies. This qualitative study strives for gathering data on the evaluation of such packages via professors' belief, knowledge and expectations on such technology. Therefore, a group of 5 experts in foreign language teaching and a group of 4 experts on instructional technologies gave evaluations in relation to their belief, knowledge and expectations. The results indicate that such applications are believed to possess both efficient and inefficient aspects that need to be addressed for the betterment of individualized learning.

Keywords: computer assisted language learning; expectation; belief; language teaching software

1. Introduction

Computer assisted language learning (CALL) packages, as a contemporary issue in foreign language instruction and an application of information communications technology (ICT), are in the lack of scrutiny by experts working on both language instruction and computer technologies. Even though commercial packages of language learning programs are promoted with the slogans of providing 'all-in-

* H. Sezgi Sarac. Tel.: +90-312-246-6666; fax: +90-312-246-6628
E-mail address: hsarac@baskent.edu.tr

doi:10.1016/j.sbspro.2013.01.111

one' solutions, sufficient research data does not exist on how well they achieve their mottos (Chappelle, 2010; Nielson & Maryland, 2011). As highlighted by Kordjazi (2012), both media scholars in general and the researchers particularly working on ESL/EFL (English as a Second Language / English as a Foreign Language) need to intervene in the development process of multimedia texts "before it is too late" (p. 60). CALL materials are to be exposed to close and critical look by scholars, especially before or right after they are launched in the world market to the appreciation of language learners. Roberts (1995) indicates that self-instructed language materials are scrutinized less when compared to the materials produced for in-class use. As such materials handed over directly from the publishers to language learners, there are no teachers or curriculum planners involved in the whole process.

While designing an instructional software program, Nabah, et.al (2009) indicate that they pay attention to the type of windows, buttons, colors and font; the interface to be user-friendly; the sequence of the screen to be of logic; enabling users browse without getting lost; the program to be easy to use; and the use of items to be without any faults. Likewise, upon the evaluation of websites designed for foreign language instruction, Erdogan and Uzun (2010) list the pedagogical features of effective applications as, providing clear-cut explanations and guidance on exercises and activities, informative and constructive feedback, innovative content, and materials that are level-appropriate, authentic and need, scope and goal related. Kan (2011) proposes criteria to evaluate self-access and online materials which are as follows:

- Accessibility: A general criterion for all resources that is online.
- Purpose: A clear statement of purpose.
- Contents: Four key features of contents are credibility, correctness, currency and comprehensiveness.
- Pedagogy: Including clear instruction, immediate feedback, and developing language skills in accordance to learners' needs.
- Construction: The design of material.

Although ICT and CALL are contemporary issues in applied linguistics, from the perspective of educational psychology, their principles are based upon the Personalized System of Instruction (PSI) suggested by Keller (1968, 1982). In the late 1960s, PSI advocated that the course material is supposed to be provided to the student in small units of study. The mastery of units is conditioned to learning the content and passing a test with a targeted mastery criterion of percentage. In case the learners cannot reach up to the targeted criterion, it is compulsory that the material is restudied and the test is retaken (Eyre, 2007). Dickinson (1975) indicates that personalized instruction postulates efficient learning based upon seven hypotheses:

1. Active responding: Engaging actively with the subject and responding to it actively.
2. Positive conditions and consequences: Positive conditions foster better learning.
3. Specification of objectives: Students are informed about the precise learning outcomes.
4. Organization of material: Well-organized material presented in small units.
5. Mastery before advancement: Before advancing to new material, the mastery of material is required.
6. Evaluation/objectives congruence: Evaluation of performance should be consistent with the objectives.
7. Frequent evaluation: Evaluation and feedback should be frequent.

Even though ICT has been contributing to language instruction since 1960s, it has been approached with hesitancy and there is paucity in ICT research in relation to expert expectations, knowledge and beliefs. Expectation theory, on one hand, explores the relation between 'motivation' functioning as beliefs that some trials will result in particular actions and 'valences' the value adhered to expected outcomes (Tolman, 1959). Wigfield & Eccles (2000) elaborate that expectancy and value determine an individual's choice, persistence and performance related with tasks and goals. Teacher knowledge, on the other hand, is viewed to have derived both from authorities and from individual experience and reasoning (Hofer, 2004). The basis of teacher knowledge, in relation to subject matter knowledge, is regarded to include "opportunities for re-examining subject matter content from the perspective of student learning" (Ben-

Peretz, 2011). And, belief is interwoven with expectations and knowledge as well as other concepts; namely, judgments, decisions, perceptions, values and opinions (Pajares, 1992). As an ICT and contemporary application, computer assisted language learning packages are in the lack of scrutiny by experts working on both language instruction and instructional technologies (IT). This qualitative study strives for gathering data on the evaluation of such packages via professors' belief, knowledge and expectations on such technology

2. Methodology

Tell Me More English is originally a language learning software program delivered to the market in CD-ROMs by the software company, Auralog. A private language school located in Istanbul, Turkey provides an online and pre-paid user access to *Tell Me More English* complete course with Turkish user interface for individual and web-based use (Avrupa Dilleri, 2011). Lafford (2004) describes the material within the program as workshops on *lesson*, *cultural*, *vocabulary*, *grammar*, *oral*, and *written*. Each lesson workshop includes 12 lessons with distinct study on the sections of *pronunciation*, *activities*, *video* and *reference works*.

The online program was reviewed by a group of experts on foreign language teaching (n=5) and another group on instructional technologies (n=4) who declared their evaluations in relation to their belief, knowledge and expectations. Each expert loaded the program and reviewed at least three units and presented related evaluations in the written form. Through code and theme identification, the content analysis of collected data was completed. Depending on the reviewers' belief, knowledge and experience of material evaluation, the data was gathered around three themes which are: the strengths of the program, the weaknesses of the program and the reviewers' suggestions and expectations from such programs.

3. Findings

3.1. Strong aspects of the program

Navigation: The participating experts on IT (n=3) indicated that the program offers satisfactory navigation capabilities for the users. Entering into the program and program sections are active and directive. Most of the commands of navigation work properly. IT reviewers (n=4) state that installment of program is user-friendly and guiding.

Interface: The user interface found to be effective by experts on IT (n=4). The interface offers partial use of the Turkish language, which makes the program user-friendly and more intelligible. The experts also (n=2) indicated that the selected colors for design are in harmony with one another. The portion of screen use with the written text and visuals is regarded to be well-balanced and effective.

Quality: The experts on IT (n=2) state that video, graphics and sound quality offered is satisfactory. The auditory and visual texts can be controlled back and forward by the user, which is indicated as a must for program management.

Customization: Both IT (n=2) and FLT (n=2) experts indicated that the program provides customization at a fair level. The users are provided with a guided tour on how the system works. The stages of teaching and program mechanics are introduced to the user.

Teaching: The FLT reviewers (n=3) pointed out that the software presents a relatively well-balanced teaching activities of communicative and mechanical techniques. The participants evaluating FLT (n=4) indicated that the presentation of target language is provided in discourse level, which fosters teaching of pragmatics. The language is represented in dialogues and learning is narrowed down to sentence, word

and sound level. Both FLT experts (n=5) and IT experts (n=3) highlighted that the speech recognition system used for the teaching of pronunciation is the strongest aspect of the program.

3.2. Weak Aspects of the Program

Turkish Interface: All the participating reviewers (n=9) state that the Turkish interface does not provide word or text translations. The translation command exists but does not function. The words are given only with their written forms and pronunciations. Besides, it is emphasized that the explanations given on grammatical use are all in the target language. With no instructional support in the native tongue, the program is found to be insufficient for the teaching of grammar and vocabulary. The EFL experts (n=3) also indicate that the instructions provided in the Turkish language are ineffective as some of them are either vague or ambiguous. Giving the instructions in Turkish is found to be useful only for elementary level learners. The instructions given in the target language is defined as a source of language input and presentation for the learners, as well (n=3).

Compatibility: Most of the reviewers (n=7) indicated that they faced problems of installment and connection, which is described as 'frustrating', 'irritating', 'demotivating' especially for the target group of learners. The software is reported to be compatible with only one web browser, which causes technical inconvenience doubled with the required add-ons and additional software to be installed on the user's computer.

Inactive commands: The link to the online services is reported as inactive by the reviewers (n=7). As the link leads to Auralog website in French, the reviewers state that the users cannot be well-informed about the services. The reviewers also indicated that the 'options' command is inactive for many functions such as adjusting the difficulty of audio input. Besides, some experts (n=4) indicated that although speech recognition is an advantageous facility, they could not get it work.

Course content and accessibility: The FLT experts (n=3) emphasize that the course content does not inform learners on language learning objectives, which hinders 'target setting' and 'goal orientation' during language learning process. Moreover, the program permits free access to whole course content without any requirements of completion or success rate. The IT (n=2) and FLT (4) experts indicate that lack of guidance or condition to proceed within the program might be misleading for users.

3.3. *Expectations*

User-friendly interface: The experts on IT (5) and FLT (3) emphasize the importance of being user-friendly of such software programs. They expect such programs to be compatible with widely used programs and systems. Effective functioning of the program on low-ram capacity computers, netbooks and with less add-ons is also highlighted.

Interaction: All the experts (n=9) state their expectations on real student-teacher and student-student interaction. Forums, blogs, chatrooms and live feedback are among expert expectations. Besides, the IT reviewers (n=2) indicate that earning credits or tokens to activate further applications in the course content increase learner motivation and curiosity. Thus, the user interacts not only with instructors or other users but also the software program as well.

Map of learning: The FLT experts (n=2) indicate their expectations on providing a map of learning for the users. They state that the lone-learners are to be informed on the syllabus and learning objectives in detail. The experts emphasize that since the software is a product on market; both consumer rights and instructional target setting concerns require detailed learner notification. The experts also expect the map of learning to be designed in line with proficiency scales; such as, Common European Framework of

Reference. With a map of learning, it is stated that learners find the opportunity to self-evaluate and self-manage themselves during the whole process.

4. Conclusion

According to the data analyzed, the Turkish interface is appreciated by the experts as it is regarded to make the program user-friendly for Turkish learners of English as a foreign language. Nevertheless, there exist problems of efficiency in the interface in terms of the clarity of instructions in Turkish, non-functioning vocabulary teaching translations and non-existing explanations of target structure in Turkish. The speech recognition and pronunciation teaching activities are reported to be effective aspects of the program, *Tell Me More*. As indicated by Wang and Seneff (cited in Luckin, et al., 2002), pronunciation training via voice-interactive CALL applications is more effective when compared to dialogue systems. Even though there are effective dialogue systems developed, "the performances are typically too brittle to be widely used by end-users" (p. 316). Although the reviewers reported the dialogue systems made use in the program to be effective as the language is presented at discourse level, they highlighted that the pronunciation teaching, especially the speech recognition system, is the strongest aspect of all.

In terms of user actions and guidance, the program is expected to include a working map of learning which informs the online user on the course content, objectives and condition of completion to proceed to further stages. Ma (2007) suggests similar findings on controlling user actions and indicates that learners need certain criteria which set meaningful parameters to guide them and to assure the quality of the learning process. The experts participated in the present study emphasize that the lack of condition in stage completion or success rate of completion might be misleading for the language learners.

The research data also indicate that the compatibility problems of installment and connection shouldmake the software program hard to use for the target group of learners. Besides, there are some commands that are not functioning properly. The user-friendliness and proper functioning of such programs are among expert expectations and regarded as the prerequisites to reach for success via use of technology. Moreover, the research data on expert opinion indicates the importance of in person contact among learners and instructors. To enhance learner motivation as well as real contact, the interactive functioning of software program with the user is also emphasized.

References

Avrupa Dilleri (2011). 12.aug.2011 <http://www.avrupadillerionline.com/login.aspx>.

Ben-Peretz, M. (2011). Teacher knowledge: What is it? How do we uncover it? What are its implications for schooling? *Teaching and Teacher Education, 27*, 3-9.

Dickinson, M. (1975).Personalized systems of instruction. Paper presented at Annual Meeting of the American Political Science Association, San Francisco, CA. Retrieved from http://www.eric.ed.gov/PDFS/ED110398.pdf

Eyre, H. L. (2007). Keller's personalized system of instruction: Was it a fleeting fancy or is there a revival on the horizon? *The Behavior Analyst Today*, *8*(3), 317-324.

Hofer, B. K. (2004). Exploring the dimensions of personal epistemology in differing classroom contexts: Student interpretations during the first year of college. *Contemporary Educational Psychology, 29,* 129-163.

Kan, S. O. (2011). Critique of a language-learning website.*US-China Education Review, 8*(5), 675-681.

Keller, F. S. (1968). Good-bye teacher… .*Journal of Applied Behavior Analysis*, *1*, 79-89.

Keller, F. S. (1982). *Pedagogue's Process*. Lawrence, KA: TRI Publications.

Kartal, E., & Uzun, L. (2010). The Internet, language learning, and international dialogue: Constructing online foreign language learning websites. *Turkish Online Journal of Distance Education-TOJDE, 11*(2), Retrieved from http://www.eric.ed.gov/PDFS/ED509946.pdf

Kordjazi, Z. (2012). Images matter: A semilogical content analysis of gender positioning in contemporary English-learning software applications. *Novitas ROYAL-Research on Youth and Language,6*(1), 59-80.

Lafford, B. A. (2004). Review of Tell Me More Spanish. Language Learning & Technology, *8*(3), 21-34. Retrieved from: http//llt.msu.edu/vol8num3/review1/

Ma, Q. (2007). From monitoring users to controlling user actions: A new perspective on the user-centered approach to CALL. *Computer Assisted Language Learning, 20*(4), 297-321.

Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research, 62*, 307-332.

Roberts, J. (1995). An anatomy of home-study foreign language courses, *System*, *23*, 513-530.

Tolman, E. C. (1959). Principles of purposive behavior.In S. Koch, (Ed.), *Psychology: A study of science*, Vol. 2, New York, NY: McGraw Hill.

Wang, C., & Seneff, S. (2007). A spoken translation game for second language learning. In R. Luckin, K. Koedinger, &J. Greer (Eds.).*Artificial Intelligence in Education: Building Technology Rich Learning Contexts that Work.* Amsterdam, Netherlands: IOS Press.

Wigfild, A., & Eccles, J. S. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology, 25*, 68-81.